

SYCAMORE CREEK BRIDGE
Texas Historic Bridges Recording Project
Spanning Sycamore Creek at County Route 288
Hamilton Vicinity
Hamilton County
Texas

HAER No. TX-58

HAER
TEX
97-HAMIL.
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BLACK AND WHITE PHOTOGRAPHY
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Department of the Interior
1849 C St., NW
Washington, DC 20240

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Location: Spanning Sycamore Creek at County Route 288, Hamilton vicinity, Hamilton County, Texas.
UTM: 14/597100/3506070
USGS: Cutoff Mountain, Texas, quadrangle (1956).

Date of Construction: 1911.

Designer: Unknown.

Builder: Montague S. Hasie.

Present Owner: Hamilton County.

Present Use: Vehicular bridge.

Significance: The Sycamore Creek Bridge is the last surviving bridge employing a Pratt half-hip pony truss in Hamilton County.

Historian: Estella M. Chung, August 1996. Revised September 1998.

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Hamilton County farmers were excited about new farming equipment. When J. N. Billingsley started using his new riding planter in 1898, "farmers came from miles away to see it in action."¹ This new farm equipment increased crop production. In 1906, 36,000 bales of cotton, the county's main crop, were ginned. Corn, oats, rye, wheat, barley, alfalfa, and millet were also grown in Hamilton County and received top prices at local markets.

Roads were critical to Hamilton County farmers, many of whom were tenant farmers. Some tenants received all their farming supplies from the landowner and were paid half of all crops produced. Others used their own supplies and were paid three-fourths of all crops produced. Roads were especially important to the latter. Typically the farmer would buy all supplies on credit and pay back the local storekeeper when the crops were sold. Without sufficient roads and bridges, the farmer could not take his crops to market, repay his debts, or make a profit.² This realization was voiced in the *Hamilton Rustler*:

The farmer has reached the point where he is a business man in every sense of the word, a man who must figure cost, profit and loss, time and expense, and all other things that any other business man takes into consideration. As a business man he can readily understand that good roads save him both time and labor. . . . With macadam roads, the farmer can come to town with his produce when the market price is best, less time and labor are consumed in taking his crops to market.³

The article was printed in 1911, the same year the Sycamore Creek Bridge was built. Located on a rural road, the bridge connected farmers to the county seat at Hamilton.

Commissioners' court records indicate that the bridge was built by a Montague S. Hasie at a cost of \$1485.00. The contractor was required "to build, paint, and erect in place, ready for all dirt fills by 3-7-1911, a steel bridge across Sycamore Creek about 14 miles from Hamilton, consisting of over 50' span and 38' approach." The county agreed to pay half upon delivery and the rest upon completion of the bridge.⁴

Montague S. Hasie, Sr., and Montague S. Hasie, Jr., were both bridge contractors operating out of the Dallas-Fort Worth area in the early twentieth century. A 1900 Fort Worth city directory lists both the senior and junior Hasie as bridge builders. By 1902, Montague S. Hasie, Sr., had moved to Dallas and established himself as president of the Texas Bridge

¹ "First Riding Planters in County," *Hamilton County News*, 24 June 1938, p. 55; quoted in Oran Jo Pool, "A History of Hamilton County" (M.A. thesis, University of Texas, 1954).

² Pool, pp. 116-17.

³ "A Little Talk About Good Roads," *Hamilton Rustler*, 22 June 1911. Microfilm, Hamilton Herald-News, Hamilton, Texas.

⁴ Hamilton County, Texas, *Commissioner's Court Minutes*, vol. 7 (Hamilton County Courthouse, Hamilton, Texas), p. 75 (November 17, 1910).

Company. County commissioners' records for the same period indicate that the company actually served as agents for the American Bridge Company, a large fabricator from New York, New York. By 1908, Montague S. Hasie, Jr., is also listed in the Dallas city directory as a bridge engineer and contractor. Therefore the Sycamore Creek Bridge was either contracted to Montague S. Hasie, Sr. or Jr., with the truss span fabricated by the American Bridge Company or another large fabricator.

The Sycamore Creek Bridge features a three-panel pin-connected Pratt half-hip pony truss with inclined end posts. The Pratt truss was a standard truss used in the early twentieth century. The design's practicality and simplicity made it an economical choice for rural communities. Pratt trusses carry loads with diagonals in tension and verticals in compression. The form was created by Thomas Pratt, probably around 1842; he and his father Caleb patented it in 1844.⁵ The Pratt half-hip pony truss, a variant on the Pratt, features trapezoidal end panels because the inclined end posts do not extend the full length of the panel.

The truss spans 49'-0" between massive stone piers. A protruding course near the top of each stone pier may represent the piers' height before a subsequent raising. Steel stringer approach spans bring the bridge's total length to 87'-0". Channels riveted to a continuous top plate and tie plates underneath form the upper chord. Diagonals are eye bars of round section in the middle panel and rectangular section in the outer panels.

The verticals, four angles connected by double riveted lattice into an I-section, have plates riveted onto their flanges. These plates fit onto the pins outside of the upper and lower chord members; the lower plates continue past the pin to support the deck beams. Flanges of the rolled I-section deck beams are extended by angles outside the truss to pick up knee bracing. The deck beams support I-beam stringers, over which transverse wooden planking is laid. Longitudinal wooden planks provide a smooth path for wheels. Crossed rods form lower lateral bracing beneath the deck.

The Sycamore Creek Bridge has served the rural community of Hamilton for eighty-five years. Its Pratt truss is a critical artifact of everyday rural life in Texas. It is the last surviving bridge employing a Pratt half-hip pony truss in Hamilton County, one of thirty-four bridges employing a Pratt half-hip pony truss in Texas, and one of twenty-six that are pin-connected.

⁵ Carl W. Condit, *American Building Art: The Nineteenth Century* (New York: Oxford University Press, 1961), p. 110.

SOURCES CONSULTED

- Condit, Carl W. *American Building Art: The Nineteenth Century*. New York: Oxford University Press, 1961.
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- Pool, Oran Jo. "A History of Milam County." M.A. thesis, University of Texas, 1954.
- U.S. Department of the Interior, Historic American Engineering Record (HAER) No. TX-60, "Bryant Station Bridge," 1996. Prints and Photographs Division, Library of Congress, Washington, D.C.

APPENDIX: Sketch Plan and Elevation

